

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-15. Cancelled.

16. (Original) An apparatus for providing gas and electric power to a plasma arc torch comprising:

a selector comprising at least a first operating position,

wherein the first operating position operates the apparatus in a first mode to deliver the gas to the plasma arc torch.

17. (Original) The apparatus according to Claim 16, wherein the selector further comprises a second operating position that operates the apparatus in a second mode to deliver the gas and the electric power to the plasma arc torch.

18. (Original) The apparatus according to Claim 17 further comprising a housing, wherein the selector is disposed within the housing.

19. (Original) The apparatus according to Claim 18, wherein the selector is slidably operable between the first operating position and the second operating position.

20. (Original) The apparatus according to Claim 16, wherein the selector further comprises a neutral position for selecting a neutral mode in which delivery of the gas and the electric power to the plasma arc torch is inhibited.

21. (Original) The apparatus according to Claim 20, wherein the selector further comprises a post that engages an adjacent member within the plasma arc torch to inhibit upward movement of the selector when the selector is in the neutral position.

22. (Original) The apparatus according to Claim 20 further comprising a housing, wherein the selector is disposed within the housing.

23. (Original) The apparatus according to Claim 20, wherein the selector is slidably operable between the first operating position, the second operating position, and the neutral position.

24. (Original) The apparatus according to Claim 20, wherein the selector is resiliently biased to the neutral position.

25. (Original) The apparatus according to Claim 24 further comprising a first spring and a second spring resiliently bias the selector to the neutral position.

26. (Original) An apparatus for providing gas and electric power to a plasma arc torch comprising:

a selector comprising at least a second operating position and a neutral position,

wherein the second operating position operates the apparatus in a second mode to deliver the gas and the electric power to the plasma arc torch, and the neutral position operates the apparatus in a neutral mode to inhibit delivery of the gas and the electric power to the plasma arc torch.

27. (Original) The apparatus according to Claim 26, wherein the selector further comprises a first operating position that operates the apparatus in a first mode to deliver the gas to the plasma arc torch.

28. (Original) The apparatus according to Claim 27 further comprising a housing, wherein the selector is disposed within the housing.

29. (Original) The apparatus according to Claim 27, wherein the selector is slidably operable between the first operating position, the second operating position, and the neutral position.

30. (Original) The apparatus according to Claim 26, wherein the selector is resiliently biased to the neutral position.

31. (Original) The apparatus according to Claim 30 further comprising a first spring and a second spring disposed within the housing, wherein the first spring and the second spring resiliently bias the selector to the neutral position.

32. (Original) The apparatus according to Claim 26, wherein the selector further comprises a post that engages an adjacent member within the plasma arc torch to inhibit upward movement of the selector when the selector is in the neutral position.

33-43. Cancelled.

44. (Original) A trigger system for providing gas and electric power to a plasma arc torch comprising:

a housing; and

a selector disposed within the housing for selecting at least a first operating position,

wherein positioning the selector in the first operating position delivers the gas to the plasma arc torch.

45. (Original) The trigger system according to Claim 44, wherein the selector further comprises second operating position that operates the plasma arc torch in a second mode to deliver the gas and the electric power to the plasma arc torch.

46. (Original) The trigger system according to Claim 45, wherein the selector is slidably operable between the first operating position and the second operating position.

47. (Original) The trigger system according to Claim 44, wherein the selector further comprises a neutral position for selecting a neutral mode in which delivery of the gas and the electric power to the plasma arc torch is inhibited.

48. (Original) The trigger system according to Claim 27, wherein the selector is slidably operable between the first operating position and the neutral position.

49. (Original) The trigger system according to Claim 47, wherein the selector further comprises a post that engages an adjacent member within the plasma arc torch to inhibit upward movement of the selector when the selector is in the neutral position.

50. (Original) The trigger system according to Claim 47, wherein the selector is resiliently biased to the neutral position.

51. (Original) The trigger system according to Claim 50 further comprising a first spring and a second spring disposed within the housing, wherein the first spring and the second spring resiliently bias the selector to the neutral position.

52. (Original) A trigger system for providing gas and electric power to a plasma arc torch comprising:

a housing; and

a selector disposed within the housing for selecting among one of a second operating position and a neutral position,

wherein positioning the selector in the second operating position delivers the gas and the electric power to the plasma arc torch, and positioning the selector in

the neutral position operates the plasma arc torch in a neutral mode to inhibit delivery of the gas and electric power to the plasma arc torch.

53. (Original) The trigger system according to Claim 52, wherein the selector is slidably operable between the second operating position and the neutral position.

54. (Original) The trigger system according to Claim 52, wherein the selector further comprising a post that engages an adjacent member within the plasma arc torch to inhibit upward movement of the selector when the selector is in the neutral position.

55. (Original) The trigger system according to Claim 52, wherein the selector is resiliently biased to the neutral position.

56. (Original) The trigger system according to Claim 54 further comprising a first spring and a second spring disposed within the housing, wherein the first spring and the second spring resiliently bias the selector to the neutral position.

57. (Original) The trigger system according to Claim 52, wherein the selector further comprises a first operating position that operates the plasma arc torch in a first mode to deliver the gas to the plasma arc torch.

58. (Original) The trigger system according to Claim 57, wherein the selector is slidably operable between the first operating position, the second operating position, and the neutral position.

59-72. Cancelled.

73. (Original) A plasma arc torch comprising:

a torch handle;

a gas control device disposed within the torch handle;

a housing disposed within the torch handle and operable with the gas control device; and

a selector disposed within the housing;

wherein the selector is operable to a first operating position such that the housing activates the gas control device, thereby operating the plasma arc torch in a first mode to deliver gas to the plasma arc torch.

74. (Original) The plasma arc torch according to Claim 73, wherein the selector further comprises a neutral position for selecting a neutral mode in which delivery of the gas to the plasma arc torch is inhibited.

75. (Original) The plasma arc torch according to Claim 74, wherein the selector further comprises a post and the torch handle further comprises a stop,

wherein the post engages the stop to inhibit upward movement of the selector when the selector is in the neutral position.

76. (Original) The plasma arc torch according to Claim 74, wherein the selector is slidably operable between the first operating position and the neutral position.

77. (Original) The plasma arc torch according to Claim 74, wherein the selector is resiliently biased to the neutral position.

78. (Original) The plasma arc torch according to Claim 77 further comprising a first spring and a second spring disposed within the housing, wherein the first spring and the second spring resiliently bias the selector to the neutral position.

79. (Original) The plasma arc torch according to Claim 73 further comprising a power switch disposed within the torch handle, and the selector further comprising a

second operating position such that the selector activates the power switch, thereby operating the plasma arc torch in a second mode to deliver gas and electric power to the plasma arc torch.

80. (Original) The plasma arc torch according to Claim 79, wherein the selector is slidably operable between the first operating position and the second operating position.

81-98. Cancelled.

99. (Original) A method of operating a plasma arc torch in a first operating mode comprising the steps of:

providing a trigger system comprising a selector; and

moving the selector to a first operating position,

wherein the first operating position operates the plasma arc torch in the first mode to deliver gas to the plasma arc torch.

100. (Original) The method according to Claim 99 further comprising the step of moving the selector to a second operating position, wherein the second operating position operates the plasma arc torch in a second mode to deliver gas and electric power to the plasma arc torch.

101. (Original) The method according to Claim 99 further comprising the step of moving the selector to a neutral position, wherein the neutral position selects a neutral mode in which delivery of the gas and the electric power to the plasma arc torch is inhibited.

102. (Original) A method of operating a plasma arc torch between one of at least a second operating mode and a neutral mode, the method comprising the steps of:

providing a trigger system comprising a selector; and

moving the selector between one of a second operating position and a neutral position,

wherein the second operating position operates the plasma arc torch in the second mode to deliver the gas and electric power to the plasma arc torch, and the neutral position selects a neutral mode in which delivery of the gas and the electric power to the plasma arc torch is inhibited.

103. (Original) The method according to Claim 102 further comprising the step of moving the selector to a first operating position such that the plasma arc torch is operated in a first mode to deliver gas to the plasma arc torch.

104. (New) A trigger system for operating a plasma arc torch comprising:
a selector,

the selector being operable in a plurality of operating positions to operate the plasma arc torch in a corresponding plurality of operating modes.

105. (New) A housing for use in a trigger system, the housing comprising a set of parallel guides to prevent rotation or misalignment of the trigger system during operation.

106. (New) A selector for use in a trigger system on a torch handle, the selector adapted to enclose components disposed within the torch handle throughout a plurality of operating positions of the selector.

107. (New) An apparatus for operating a device in a plurality of operating modes, the apparatus comprising a single element comprising a plurality of features that function to select among the plurality of operating modes.

108. (New) A trigger system comprising:
a torch handle defining internal stop; and
a selector adapted for engagement with the stop,
wherein the internal stop and the selector define contoured adjacent faces that engage to position features of the selector for operating in a plurality of modes.